

Northwest Kansas Ground Water Management District No 4  
Regulations  
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As used in these rules and regulations, the following words and phrases shall have the following meanings:

(a) Board means the board of directors constituting the governing body of the Northwest Kansas Groundwater Management District No.4.

(b) District means the northwest Kansas groundwater management district No.4

Series of wells means a group of not more than three wells that: (1) are filed on separate applications; (2) are in the same local source of supply; (3) are within a 300 foot radius circle; (4) supply water to a common distribution system; and (5) do not exceed a maximum of 250 gallons per minute per well.

(d) Tailwater means that portion of the applied irrigation water which becomes run-off from the authorized place of use.

(e) Well means any excavation that is drilled, cored, bored, washed, driven, dug or otherwise constructed when the intended use of such excavation is for the acquisition, diversion, or artificial recharge of groundwater.

(f) Saturated thickness means the thickness of an aquifer which is saturated by groundwater. The measurement shall be the difference between the elevations of the recovered static water table and the top of bedrock formation.

(g) Waste of water means: (1) Groundwater which has been diverted or withdrawn from a source of supply and which is not used, managed or re-applied to a beneficial use on or in conjunction with land authorized as the place of use by a vested right, an appropriation right or an approved application for permit to appropriate water for beneficial use; (2) Any act or omission causing the unreasonable deterioration of the quality of water in any source of supply, thereby causing impairment of a person's right to the use of water; (3) Groundwater which an irrigator permits to escape and drain from the authorized place of use; (4) Groundwater applied to an authorized beneficial use in excess of the needs for such use; (5) Failure to recycle or reuse water on or in connection with the authorized place of use whenever reasonably possible for all the beneficial uses of water; and (6) The application of water in a manner which is below efficiency standards currently considered technologically and economically feasible.  
(Authorized by K.S.A. 1983 Supp. 82a-1028(o); implementing K.S.A. 1983 Supp. 82a-1028(n);

effective May 1, 1983; amended May 1, 1985.)

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(a) Except as set forth in subsection (1)) below, all applications for a permit to appropriate water for beneficial use and all applications for a change in the point of diversion filed on permits with a priority date on or after the effective date of this regulation shall be subject to the following criteria:

(1) The sum of the proposed appropriation, the vested rights, prior appropriation rights and earlier priority applications legally described within the area of consideration shall not exceed the calculated quantity of annual recharge received by the aquifer underlying the area of consideration. The quantity authorized on all prior permits, certificates and vested rights and the quantity requested on prior applications shall be used to calculate the sum of prior appropriations.

(2) All limitation clauses listed on permits and certificates shall be considered to be in force.

(3) In the case of an application for change in the point of diversion, referred to above, all applications with a priority earlier than the priority established by the filing of the application for change shall be included in the analysis.

(4) The allowable annual appropriation shall be calculated using the formula:

$Q = AR/12$  where:

(A) Q is the allowable annual appropriation in acre-feet per year.

(B) A is the area of consideration consisting of the area which includes each 10-acre tract located entirely within or intersected by a two-mile radius circle whose center is the center of the smallest discernable tract wherein the proposed well is to be located. The smallest discernable tract shall be the tract described in the application for permit to appropriate water and shall not be larger than a nominally described section of land nor smaller than a 10-acre tract of land.

R is the average annual recharge in inches per year.

(5) A value of .5 inch per year shall be used for the purpose of considering recharge, including natural recharge and return flow from irrigation, unless site-specific information is available.

(6) If a portion of the area of consideration is outside the district boundary, the district will request all available information on water rights from the division of water resources, and the evaluation shall be conducted as though the entire area of consideration was within the district boundary. In the event a portion of the area of consideration is outside the State of Kansas, that portion of the area of consideration shall be excluded from the analysis.

(7) If the perimeter of the area under consideration intersects a group of wells authorized under prior applications, permits, certificates or vested rights, a reasonable quantity of water shall be assigned to each well based upon the best available information.

(1)) The following applications are not subject to this allowable withdrawal regulation:

(1) Applications for a permit to appropriate water for domestic use;

(2) Applications for a permit to appropriate water by means of covering wells withdrawing water from non-Ogallala aquifers;

(3) Applications for temporary permits;

(4) Applications for change in point of diversion if the well has been drilled, cased and test pumped, or if the diversion works have been completed and a notice of proof was timely filed with the chief engineer under the original approval of application and permit to proceed; and

(S) Applications for a permit to appropriate water requesting a quantity of water equal to or less than that quantity of water which will be conjunctively reduced from the currently available quantity under an existing water right or water rights within one-half mile of the proposed point of diversion. Prior to the reduction, the existing water right or water rights shall be reviewed and adjusted to reflect recent historical beneficial use. Factors used to determine recent historical beneficial use shall include but not be limited to: (A) reported water usage; (3) cropping patterns, system type, and consumptive use requirements for irrigation, if applicable; reasonable use; (1)) waste of water violations; and (E) non-pumpage or reduced pumpage without due and sufficient cause.

Applications for a permit to appropriate water by means of well(s) requesting 25 acre-feet or less for reasonable small water use needs shall be approved on a case-by-case basis as determined by the board with the approval of the chief engineer.

(d) Exceptions to this regulation may be granted on an individual basis by recommendation of the board and with the approval of the chief engineer. The board may require the applicant to submit additional information as it deems necessary in order to make a determination that the exception will not impair existing rights nor prejudiciously and unreasonably affect the public interest. (Authorized by K.S.A. 1983 Supp. 82a-1028(o); implementing K.S.A. 1983 Supp. 82a-1028(n); effective May 1, 1983; amended May 1, 1985; amended May 1, 1987; amended August 19, 1991.)

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(a) For wells proposed in the Ogallala aquifer which have satisfied the criteria of regulation 5-24-2, and for wells proposed in alluvial aquifers isolated from the Ogallala aquifer, the

required spacing from all non-domestic existing or proposed wells authorized by an approval of application and permit to proceed, certificate of appropriation for beneficial use of water, or vested right shall be:

- (1) 0 to 175 acre-feet requested - minimum spacing 1,400 feet;
- (2) 176 to 350 acre-feet requested - minimum spacing 2,000 feet;
- (3) 351 to 575 acre-feet requested - minimum spacing 2,400 feet; and
- (4) more than 575 acre-feet requested - minimum spacing 2,800 feet.

(b) All applications for non-domestic wells shall be spaced a minimum of 800 feet from domestic wells constructed in the same aquifer unless the domestic wells are owned by the applicant, or the domestic well owner has granted written permission to reduce the spacing.

Any non-domestic application for additional water from an existing well already covered by water rights shall meet the minimum spacing requirements above for the cumulative total of all existing water rights, earlier appropriations and the proposed appropriation for that well.

(d) For a battery of wells or for a series of wells, the well spacing shall meet the minimum spacing above based on the total amount of water applied for by the battery or series. The minimum spacing distance shall be measured from the outside of the 300 foot radial circle which is centered on the point which is equidistant from the wells within.

(e) Non-domestic wells withdrawing water from a cretaceous aquifer shall be spaced a minimum of 5,000 feet from all existing wells withdrawing water from the same aquifer.

(f) Exceptions to this regulation may be granted on an individual basis by recommendation of the board and with the approval of the chief engineer. The board may require the applicant to submit additional information as it deems necessary in order to make a determination that the exception will not impair existing rights nor prejudicially and unreasonably affect the public interest. (Authorized by K.S.A. 1981 Supp. 82a-1028(o); implementing K.S.A. 1981 Supp. 82a-1028(n); effective May 1, 1983)

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#### 5-24-4 TAILWATER CONTROL AND WASTE.....

No water user shall allow any water which is being, or has been, diverted under any approval of application and permit to proceed, certificate of appropriation for beneficial use of water, or vested right for irrigation use to leave the land on which it is being, or has been, beneficially applied pursuant to the terms and conditions of that approval of application and permit to

proceed, certificate of appropriation or vested right.

All water users shall construct, operate and maintain their water distribution systems in such a manner as to prevent waste of water. (Authorized by K.S.A. 1981 Supp. 82a-1028(o); implementing K.S.A. 82a-1028(n); effective May 1, 1983.)

#### 5-24-5 ALLOWABLE APPROPRIATION -- REASONABLE USE.....

The following guidelines shall be used to determine if a proposed appropriation of groundwater is reasonable for the intended use.

(a) Irrigation use. No application for irrigation use shall be allowed more than the amount of water in acre-feet which exceeds:

(1) An average of two acre-feet per acre on the land proposed to be irrigated; or

(2) The reasonable needs of the applicant. In determining the amount of water deemed reasonable on an application for irrigation use, consideration shall be given to: (A) irrigation system design; (B) tailwater control methods; well yields; (D) cropping patterns; E) soil types; and (F) any other information necessary to evaluate the proposed use of water.

b) Municipal use. In determining the amount of water deemed reasonable on an application for municipal use the following criteria shall be used:

(1) The amount for population shall be based on a population projection for the ensuing 20 years. If population projection data is not available, the 20 year projected population shall be determined by extending present population for 20 years at one and one-half percent per year increase. The total amount reasonable for population shall then be determined by increasing present per capita use by 10% and multiplying that figure by the projected population.

(2) The present and projected industrial use for a 20 year period shall also be considered.

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Stockwater use. For cattle, the amount of water totaling 15 gallons per head per day for the projected five year maximum stock population shall be considered reasonable. Additional quantities for other than stock drinking purposes may be considered on a case by case basis.

(d) Other uses. All applications for any other use shall be reviewed to determine if the amount and rate of diversion requested are reasonable for the intended use.

(e) Exceptions to this regulation may be granted on an individual basis by recommendation of the board and with the approval of the chief engineer. The board may require the applicant to

submit additional information as it deems necessary in order to make a determination that the exception will not prejudicially and unreasonably affect the public interest. (Authorized by K.S.A. 1981 Supp. 82a-1028(o); implementing K.S.A. 1981 Supp. 82a-1028(n); effective May 1, 1983; amended August 19, 1991.)

#### 5-23-6 CHANGES IN POINTS OF DIVERSION.....

(a) Replacement wells. A replacement well shall be relocated within 2,640 feet of the originally approved location provided the new location satisfies the well spacing criteria herein, and if the replacement well will be withdrawing water from the same local source of supply.

(1)) Additional wells. if it becomes necessary to construct an additional well for the purpose of diverting the authorized amount of water under a certificate of appropriation for beneficial use of water or vested right, the additional well or wells shall satisfy regulation 5-24-3. An additional well or wells shall not be considered for an appropriation unless the water right in question has had a certificate of appropriation issued. At no time shall the total quantity of water diverted or the maximum diversion rate from the existing well or wells plus the additional well or wells exceed the amount and rate authorized under the certificate of appropriation for beneficial use of water or vested right. Moreover, the additional well or wells plus the original well or wells involved in the certificate of appropriation for beneficial use or vested right shall be properly and adequately metered.

Exceptions to this regulation may be granted on an individual basis by recommendation of the board and with the approval of the chief engineer. The board may require the applicant to submit additional information as it deems necessary in order to make a determination that the exception will not prejudicially and unreasonably affect the public interest. (Authorized by K.S.A. 1981 Supp. 82a-1028(o); implementing K.S.A. 1981 Supp. 82a-1028(n); effective May 1, 1983)

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#### 5-24-7 WELL CONSTRUCTION CRITERIA.....

(a) All non-domestic wells completed after the effective date of this regulation shall include the installation of a check valve that meets or exceeds specifications set by the chief engineer, division of water resources.

(b) All wells, including domestic, to be completed in a cretaceous aquifer shall be constructed in such a way that the cretaceous aquifer is prevented from mixing with all quaternary, tertiary and any other cretaceous water-bearing strata.

Exceptions to this regulation may be granted on an individual basis by recommendation of the board and with the approval of the chief engineer. The board may require the applicant to submit additional information as it deems necessary in order to make a determination that the exception will not prejudicially and unreasonably affect the public interest. (Authorized by

K.S.A. 1981 Supp. 82a-1028(o); implementing K.S.A. 1981 Supp. 82a-1028(n); effective May 1, 1983)